Testimony of
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Before the House Committee on Transportation and Infrastructure
Subcommittee on Railroads, Pipelines, and Hazardous Materials

July 15, 2010

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Thank you, Chairwoman Brown, Ranking Member Shuster, and Members of the Subcommittee. I am Rich Adams of Enbridge Energy Company, Inc. and appreciate the opportunity to participate in this hearing.

I am Vice President, U.S. Operations for Enbridge Liquids Pipelines and have over 20 years experience working for Enbridge in various engineering, operating, and leadership positions with Enbridge's natural gas and liquid petroleum pipeline businesses. My experience has included engineering; field operations and engineering; management positions in our joint-venture pipeline in Bogota, Colombia and our U.S. natural gas business unit headquartered in Houston. I recently oversaw Engineering, Procurement and Construction for our recent multi-billion pipeline expansion projects. Enbridge Energy Company, Inc. is the operator of our U.S. gas and liquid pipeline businesses owned by publicly traded Enbridge Energy Partners, L.P., Enbridge Inc., or joint ventures in which we own an interest. Together these various affiliated entities are referred to simply as "Enbridge", except when a legal entity description is required. Enbridge owns and operates a diversified portfolio of crude oil and natural gas transportation systems in the United States and Canada. Its principal crude oil system is the largest transporter of growing oil production from western Canada into refineries throughout the Upper Midwest, accounting for approximately 11 percent of total U.S. oil imports. In fact, Enbridge supplies an estimated 50% of the crude oil refined in the Great Lakes region, and in Minnesota alone, Enbridge supplies nearly 90% of the crude oil refined in the state. In the U.S., Enbridge's natural gas gathering, treating, processing and transmission assets are principally located in the active U.S. Mid-Continent and Gulf Coast area. Enbridge operates over 7,000 miles of crude oil and liquid petroleum gathering and transportation pipelines lines in the U.S. and now has approximately 30 million barrels of crude oil storage and terminaling capacity. Enbridge has 1,934 employees in the United States.

I am pleased to provide some perspectives from Enbridge's experience in our Liquids Pipelines business with implementation of the Integrity Management regulations that have been in place for approximately a decade. I appreciate that this hearing is one of a series the Committee has held or planned, so I will attempt to build on what I understand has been presented previously.

<u>The Integrity Management Rules Are Built Upon Decades of Pipeline Safety Regulation</u>
The Department of Transportation, Pipeline and Hazardous Materials Safety Administration's (PHMSA) Office of Pipeline Safety (OPS) has developed comprehensive rules over many decades. These regulations have been improved and expanded over this timeframe, building on new technology, experience, societal expectations for high performance and in some cases lessons-learned from accidents. The effectiveness of these extensive regulations along with industry-driven initiatives to raise the safety-bar for petroleum pipelines led to a reduction in the frequency of releases from liquid pipelines. Specifically, according to the industry's pipeline performance tracking system, the frequency of liquid petroleum pipeline spills decreased from 2 incidents per thousand miles in 1999-2001 to 0.7 incidents per thousand miles in 2006-2008, a decline of 63 percent. Similarly, the number of barrels released per 1,000 miles decreased from 629 in 1999-2001 to 330 in 2006-2008, a decline of 48 percent. Enbridge's pipeline safety record has also similarly improved over this timeframe. The industry is proud of this record, but continues to strive for zero releases, zero injuries, zero fatalities and no operational interruptions. Enbridge shares this laudable goal and we've established our own corporate social responsibility

and reporting, and operating performance goals – objectives that all managers are held to each year in their personal performance evaluations.

Enbridge has focused a great deal of resources in pipeline and systems integrity, including but not limited to corrosion control, detection of material defects so they can be repaired prior to leaking, technology improvement and worker qualification. And despite significant progress over the last twenty years, Enbridge supports, along with many other initiatives, continued efforts to reduce the risk of 3rd party excavation damage. The Pipeline Inspection, Protection, Enforcement, and Safety Act of 2006 (PIPES Act) took an important step forward by creating incentives for states to adopt improved damage prevention programs. It did not, however, go far enough. One of the largest risks still existing in some state's damage prevention programs is the exclusion of certain excavators from the notification requirements of state "one-call" systems. These groups often include municipalities, state highway departments, and railroads. In order to provide maximum protection to the public, exemptions from state "one-call" requirements should be eliminated.

Third-party damage is only one area of focus in Enbridge and the pipeline industry's safety practices and OPS's liquid pipeline safety regulations. The breadth of these regulations begin at the design stage – such as material specifications and construction codes – and include a broad range of operating, maintenance, reporting, inspection and worker qualification requirements. These mandates focus on practices shown over time to reduce the risk of corrosion, material defect, worker error and excavation damage or other threats to pipeline safety. Since the 1960's when our modern-day federal regulatory regime began, the focus of the OPS has been on implementing or expanding mandates that strive to reduce both the probability of pipeline failures as well as decrease the consequences of a pipeline leak.

As societal expectations increasingly focused on the value of protecting both the environment **and** public safety, the federal pipeline safety regulations have evolved. OPS's and industry's environmental protection priority was particularly heightened after Congress passed the Pipeline Safety Reauthorization Act of 1996.

Enactment of the Liquid Pipeline Integrity Management Rules

It is within this backdrop that today's comprehensive federal pipeline safety standards evolved. In the years leading up to enactment of the Integrity Management Plan rules, the industry and OPS had been working toward a more risk-oriented approach to rulemaking. This approach was first tested by creation of an Interim Risk Management Consensus Standard, developed with involvement of OPS technical representatives. Very soon, however, OPS began the effort to implement the current Integrity Management Plan rules, after working with all stakeholders and the Technical Hazardous Liquids Pipeline Safety Committee to define those areas along pipeline routes that were of the highest priority. As ordered by Congress in the early 1990's, "High Consequence Areas" ("HCAs") were defined for hazardous liquid pipelines as (1) highly populated areas, (2) commercially navigable waterways, and (3) unusually environmentally sensitive areas. While the comprehensive federal regulations already mandated design, construction, operating, maintenance and emergency preparedness standards for all pipeline segments, these categories of HCAs were deemed of high enough value to warrant additional preventative and mitigative actions.

This is an important point to reinforce. Specifically, there have been characterizations by some that imply that non-HCA segments somehow receive little oversight simply because they do not fall under Integrity Management Plan mandates. It is Enbridge's view that this perspective misses the whole premise of risk-management, whereupon the pipeline system continues to be maintained to a federally mandated baseline regime and a wide array of technical standards developed under ANSI stakeholder involvement and development guidelines. Therefore in High Consequence Areas additional resources are placed over and above this baseline to even further reduce the risk in especially sensitive areas where our tolerance for impact is even lower than elsewhere.

Currently, according to the PHMSA website, 44 percent of liquid petroleum pipeline mileage could affect an HCA justifying this additional layer of oversight and preventative measures. Non-HCA pipeline segments are still subject to the comprehensive rules in 49 CFR Part 195. Moreover, operators of liquid pipelines must also comply with the comprehensive spill prevention and response planning requirements for jurisdictional pipelines found in 49 CFR Part 194 and Parts 190 and 199 apply to enforcement and drug and alcohol testing, regardless of whether the pipeline is in a HCA.

Enbridge Experience with the Liquid Pipeline Integrity Management Plan Rules

Enbridge management participated in the development of consensus technical standards and the current Integrity Management Rules. In the U.S., Enbridge operates 7,800 miles of onshore liquid pipeline subject to 49 CFR Parts 194 and 195, of which approximately 40% are in locations that could affect an HCA.

Enbridge completed the baseline integrity assessments of all the HCA segments by the 2008 deadline and we have updated our analysis to show new or revised HCA's along the system or reflect new pipelines built in recent years. We are now in the process of completing re-assessments within the prescribed timelines. Baseline IMP assessments are an effective means of identifying any material or construction defect as well as corrosion. In-line inspection devices, or "smart pigs", are the predominate means for performing integrity assessments within the Enbridge Liquids Pipeline system because the mainline pipe was designed to accommodate the devices and they are the most versatile and efficient devices for the required integrity assessment inspection process. In fact, Enbridge had been using increasingly sophisticated internal inspection devices in our liquid system integrity program for more than a decade prior to the Integrity Management rules. The other methods of integrity assessment baseline testing – such as hydrostatic pressure tests and direct assessments, while appropriate when smart pigs cannot be used, often require significant interruptions in pipeline service.

While only 40% of our system could affect an HCA, nearly 100% of the mileage has been inspected (often a number of times) with internal inspection devices. This is consistent with OPS information on their website that more miles of liquid pipeline have been internally inspected than required by federal rules, as most liquid pipelines can accommodate internal inspection devices and the nature of device requires movement through many miles between internal inspection device launching and receiving traps – passing along both HCA and non-HCA mileage.

The natural question is why wouldn't the industry just support an expansion of the Integrity Management Rules beyond HCA's? It is important to emphasize that the Integrity Management Plan rules are far more than simply an inspection mandate. Simply put, pipeline operators must identify, prioritize, assess, evaluate, repair and validate—through comprehensive analyses—the integrity of hazardous liquid pipelines that, in the event of a leak or failure, could affect High Consequence Areas (HCAs) within the United States. There are repair deadlines based on technical codes for repairs in non-HCA's. The cornerstone of the Integrity Management Rule is a risk and threat assessment, and OPS inspectors have spent many days reviewing Enbridge's analysis of potential threats of hazards in HCA's and our rationale for reducing the potential for such incidents. Going back to a prescriptive "one-size-fits-all" mandate treating all areas along the pipeline and all hazards as equal misses the premise of risk-management that considers both the likelihood and consequences of an incident.

High Consequence Areas by definition will evolve over time as Enbridge has already supplemented updates to originally defined HCA's along our system, along with a corresponding update in our Integrity Management Plans. The update in HCA's complies with OPS regulations requiring reassessment of pipeline systems for the presence of new HCA's, such as growing population centers, new sole source drinking water resources or state-identified species designations. We believe Congress and OPS were correct to implement a risk-based system to manage the integrity of our nation's energy pipelines. Such a system supplements the baseline pipeline safety protection practices by directing additional resources where a potential release would have the greatest consequence on the public and the environment. Enbridge shares the pipeline industry's concerns with simply mandating Integrity Management requirements on every pipeline segment in the country.

Enbridge has invested considerable resources toward assessing, maintaining and growing our liquid pipeline energy delivery infrastructure. Our customers and the public demand reliable energy supply and our investors expect that we manage risks to their investment in our company. Therefore, in addition to a value held by Enbridge, we know that communities, customers, regulators, investors and Congress all hold us to high standards for reliable, economic and safe deliver of liquid petroleum.

Conclusion

In summary, Enbridge operates one of the nation's largest volume liquid pipeline systems delivering more than 11% of U.S. import crude oil supply. Safety and protection of the public and environment are our highest priorities, indeed I think it is a fair reading of our publications and actions that we hold this as a core value – not just a priority. In addition, as a critical supply of crude oil to refineries in America's heartland, we take our responsibility for customer and consumer supply reliability just as seriously. We believe the liquid Integrity Management Plan rules have only recently been fully implemented and need time for OPS and industry to evaluate for effectiveness. Significant resources have been spent in compliance with the Integrity Management Rules. However, these supplementary safety resources are well-spent for protecting our nation's more important high-consequence areas. Meanwhile, Enbridge – and the pipeline industry as a whole – continues to adhere to the current comprehensive federal regulations that serve as an extensive pipeline safety baseline for the entire pipeline system. The

industry's record has shown noteworthy continuous improvement over recent decades and is second to none in transportation safety of petroleum.

This concludes my testimony and I am happy to answer any questions that members of the committee may have.